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journal homepage: www.elsevier.com/locate/healthpolPublic reporting on quality, waiting times and patient experience in 11 high-income countries[☆]

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ABSTRACT

This article maps current approaches to public reporting on waiting times, patient experience and aggregate measures of quality and safety in 11 high-income countries (Australia, Canada, England, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland and the United States). Using a questionnaire-based survey of key national informants, we found that the data most commonly made available to the public are on waiting times for hospital treatment, being reported for major hospitals in seven countries. Information on patient experience at hospital level is also made available in many countries, but it is not generally available in respect of primary care services. Only one of the 11 countries (England) publishes composite measures of overall quality and safety of care that allow the ranking of providers of hospital care. Similarly, the publication of information on outcomes of individual physicians remains rare. We conclude that public reporting of

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aggregate measures of quality and safety, as well as of outcomes of individual physicians, remain relatively uncommon. This is likely to be due to both unresolved methodological and ethical problems and concerns that public reporting may lead to unintended consequences. © 2016 The Authors. Published by Elsevier Ireland Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

The public reporting of the quality of health care and the performance of health care providers has expanded in recent years, often using dedicated websites targeted at the general population. A wide range of measures is available. Three broad types of information can be distinguished, relating to:

- health care outcomes (such as mortality rates or rates of complication);
- provider performance (such as waiting times, length of stay or other care processes);
- patient experience and satisfaction (as elicited through patient surveys).

Advocates of public reporting believe that it helps to improve transparency and accountability, empowers patients to make informed choices, and provides policy-makers and third-party payers with the knowledge to inform decisions on payment, including rewarding high or penalising low performers [1,2]. Public reporting of performance data is thought to improve the quality of care through two principal pathways: the first ('improvement through selection') believes that information on quality provides users with knowledge that will enable them to select providers according to quality criteria, while in the second ('improvement through change'), quality improvement is achieved through changes in provider behaviour. In this latter pathway, information is seen as helping providers to identify areas of underperformance and reporting can act as a stimulus for improvement, motivating providers to compete on quality [3,4].

Public reporting does, however, face several challenges. First, publication can have unintended consequences, creating perverse incentives that could ultimately damage quality and public trust. For example, providers may become more reluctant to take on high-risk patients, clinical priorities might become distorted, and staff morale may be reduced [3].

Another concern relates to the accuracy of the information used and the extent to which it reliably reflects provider performance [5–7]. The selection of meaningful indicators is a particular problem [2]. The experience of the United States is of particular relevance here, as indicators of provider performance have been published for over two decades. By 2012, the United States National Quality Forum (a non-profit organisation) had endorsed more than 750 measures [2]. However, there is little overlap between the indicators used in various programmes [8] and a study of 29 private insurance plans identified 550 indicators, few coinciding with those used in public programmes [9]. A study comparing four national rating systems of hospitals in the

United States found different systems producing different results, with only 10% of the 844 hospitals that were ranked as top performers in one system designated as high achievers in any of the other systems [10]. Although these systems were intended to inform patient choice, the study found that they tended to confuse rather than guide informed decision-making [10]. Indeed, despite 20 years of comparisons of hospital quality in the United States, consumers take such information into account only to a small extent in their choice of provider [11].

A number of other countries have also invested considerable efforts to collect and publish data on outcomes, provider performance and patient experience. Examples in Europe include Sweden, the Netherlands, Germany and England. However, countries differ in the extent to which they make such data publicly available. England appears to have gone further than most in providing single composite ratings of provider performance, in addition to measures of performance in specific areas, or using multi-dimensional profiles. For example, its Care Quality Commission, the regulator of health and adult social care, generates a composite rating of each provider based on whether they are safe, effective, caring, responsive to people's needs and well-led [12–14].

There is, however, little explicitly comparative information so far on the current state-of-the-art of public reporting in high-income countries. Our study sought to provide a comparative analysis of public sector approaches in 11 high-income countries towards the collection and publication of provider performance data. Such a comparative analysis is useful for two reasons: First, publication of information on provider performance is often viewed as promoting transparency on the performance of health systems. Second, an analysis of how approaches differ may reveal their strengths and weaknesses.

The study was undertaken by the European Observatory on Health Systems and Policies in response to a request of the English Department of Health. A summary overview of key findings was published by the Department of Health [13].

2. Materials and methods

Data were collected by means of a questionnaire (see [supplementary web appendix](#)) for self-completion by key informants in Australia, Canada, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland and the United States, exploring the following areas of public reporting (i) overall ratings for quality and safety of care (for every major hospital, general practice, residential care provider and domiciliary care provider); (ii) outcomes of individual health care professionals on indicators, such as mortality or other measures of performance; (iii) waiting times between referral and treatment for every

major hospital; and (iv) patient experience of hospital and GP services for every provider.

The selection of countries was identical to those included in the Commonwealth Fund's survey of health systems but was independent of it [15]. The selection of themes was intended to represent the full range of health service sectors (primary care, acute inpatient care, and residential care) and to identify measures that reflect overall levels of performance.

Key informants were identified purposively from the Observatory's network of experts, including its Health Systems and Policy Monitor (<http://www.hspm.org>). There were 1–3 experts per country, who worked together in completing the questionnaire for the respective country. Experts were chosen on the basis of having deep insight into the policy process in a given country through active involvement in research and policy development and a proven ability to review national documents, programmes and initiatives within a short period of time. Data collection took place in July 2015 and comprehensive responses were received from each of the 10 countries. For England, the coordinating authors (BR, EN) provided the required information. They also verified information on websites provided by the experts.

3. Results

3.1. Overall ratings for quality and safety of care

England is the only one of the 11 countries included in this analysis that publishes an overall rating for every major hospital (Table 1). There, the Care Quality Commission rates the performance of health care providers on the basis of 5 dimensions: whether they are safe, effective, caring, responsive and well-led. Each provider (in addition to acute care hospitals, this includes general practices, care homes and providers of domiciliary care – see below) is evaluated on the basis of these dimensions and composite rankings are then created and published online (<http://www.cqc.org.uk/>). The Swedish association of local authorities and regions SALAR published a comparison of the 21 county councils using a composite of 100 indicators

in 2011 [16], but this is not being done on a regular basis. Although the comparison is of county councils, most indicators relate to specialist services (i.e. hospitals).

England is again the only one among the 11 countries that publishes an overall rating for general practice. In France, an overall rating is constructed but only used in the pay for performance (P4P) scheme in ambulatory care. It is not made publicly available. The remaining nine countries reported that no overall rating had been introduced for each individual practice, and none reported plans to do so.

Turning to residential (long-term) care, England, Germany [17] and the United States [18] were the only countries among the 11 reviewed that reported an overall rating for every provider, while England and Germany also provide overall ratings of every provider of domiciliary care which are made publicly available [17]. None of the other countries reported having introduced such ratings and none seems to have plans to introduce them.

3.2. Rating of outcomes of individual professionals

Mortality rates achieved by individual hospital specialists nationwide are only being published in England (<https://www.nhs.uk/service-search/performance/Consultants>), although there are exceptions in parts of the United States, such as New York State, which publishes mortality rates of individual cardiac surgeons [19], and California, which publishes quality ratings for individual surgeons undertaking coronary artery bypass graft surgery [20].

Key informants responding to the survey noted concerns with regard to conceptual and methodological issues (Norway), ethical considerations (Netherlands), or both (New Zealand and Sweden), with problems identified including problems of attribution, risk adjustment and randomness, and concerns over holding professionals accountable for outcomes outside of their control. In New Zealand, concern was raised about the reliability of measures based on small numbers, especially in provincial hospitals, and the limitations of systems for adjusting for case mix and complexity.

Table 1
Overview of results on public reporting across the different dimensions covered.

	Australia	Canada	England	France	Germany	Netherlands	New Zealand	Norway	Sweden	Switzerland	United States
Rating for overall quality and safety											
Each major hospital	No	No	Yes	No	No	No	No	No	No	No	No
Each GP surgery	No	No	Yes	No	No	No	No	No	No	No	No
Each provider of residential (long-term) care	No	No	Yes	No	Yes	No	No	No	No	No	Yes
Each provider of domiciliary care	No	No	Yes	No	Yes	No	No	No	No	No	No
Rating of outcomes of individual professionals											
Hospital specialists	No	No	Yes	No	No	No	No	No	No	No	No
GPs	No	No	No	No	No	No	No	No	No	No	No
Waiting times for hospital treatment											
Each major hospital	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	No	Yes
Patient experience at the level of hospitals or GP practices											
Each major hospital	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Each GP surgery	No	No	Yes	No	No	Yes	No	No	Yes	No	No

Table 2

Public reporting of information on waiting times for hospital treatment for every major hospital.

	Data on referral to treatment times available for each major hospital	If such data are not available at hospital level, at which level is it available?	Website if data are publicly available	If data on referral to treatment times are not yet publicly available, are there plans to develop these?
Australia	Yes	n.a.	http://www.myhospitals.gov.au/	n.a.
Canada	Yes	n.a.	www.yourhealthsystem.cihi.ca/hsp/	n.a.
England	Yes	n.a.	https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/	n.a.
France	No	None	n.a.	No
Germany	No	None	n.a.	No
Netherlands	Yes	n.a.	http://www.zorgatlas.nl/thema-s/wachttijsten/wachttijsten-ziekenhuiszorg/	n.a.
New Zealand	No	Regional	http://www.health.govt.nz/system/files/documents/pages/health-target-q3-results-2014-15b.pdf	No
Norway	Yes	n.a.	http://frittsykehusvalg.no/start/#	n.a.
Sweden	Yes	n.a.	www.vantetider.se	n.a.
Switzerland	No	None	n.a.	No
United States	Yes	n.a.	https://www.medicare.gov/hospitalcompare/	n.a.

None of the 11 countries reported that information on outcome measures by individual GPs was made publicly available and none seems to have plans to do so. However, in Germany there are initiatives at the practitioner level to develop sets of indicators (for GPs and specialists in ambulatory care). In the United States, physicians and group practices assess the quality of care they provide to their patients through the Physician Quality Reporting System (PQRS) [21]. This is an optional reporting system for eligible providers of Medicare patients (30 million elderly), with financial penalties for non-participation. The PQRS measures for physicians will be publicly available.

3.3. Waiting times for hospital treatment: referral to treatment times

Information on waiting times is reported widely by the countries included in this study (Table 2). This includes the public reporting of data on time between referral and treatment for each major hospital in six countries. In Germany and Switzerland, waiting times appear to not generally be considered a ‘problem’ although hospitals can document, as part of their reporting of patient experience (see also below), whether patients had to wait for treatment [22]. In New Zealand, the only information reported as available is the percentage of patients who receive cancer treatment within 62 days of being referred with a high suspicion of cancer, this being one of 6 national health targets that aim to improve the performance of health services [23]. This information is, however, published at district health board (DHB) level (responsible for providing or funding the provision of health services in their district) rather than individual hospital level (although most DHBs have only one major hospital providing cancer treatment). In the Netherlands, information on waiting times is available for a wide range of treatments, including cardiology, geriatrics, surgery and paediatrics [24], and information on waiting times by specialty is also available in the other countries that report waiting times (Table 2).

3.4. Patient experience at facility level

Nine of the 11 countries are reported to collect data on patient experience of hospital care at the hospital level and seven of these make this information available to the public (Table 3).

Regarding general practice, only England, the Netherlands and Sweden appear to make information on patient experience publicly available at the level of individual general practices. However, Norway is reported to be planning to make this information publicly available in the future.

4. Discussion

Our study contributes to research and policy by mapping current approaches to the public reporting of provider performance data in 11 high-income countries. We found that the information most commonly made available to the public is on waiting times for hospital treatment. Many countries also make available information on patient experience at the hospital level, while similar data on general practices are currently only available in a minority of countries.

Our findings on the public reporting of waiting times are not surprising. Public reporting of waiting times for elective procedures has become common in many high-income countries, often coupled with policies to increase patient choice. In those countries where waiting times are a public concern, they figure prominently in health policy debates. They are also relatively straightforward to measure from the point of referral, although the impact of publishing them remains uncertain [25].

Patient experience of providers at facility level is another measure being published in an increasing number of countries. These data also have the advantage of being relatively easy to capture, although, again, the impact of publication on the performance and quality of providers is largely assumed rather than proven [26].

England was the only one of the 11 countries that publishes composite ratings of the overall quality and safety of

Table 3

Public reporting of information on patient experiences of hospital care for every major hospital.

	Data on patient experience of hospital care available for each major hospital?	If such data are not available at hospital level, at which level are they available?	Website if data are publicly available	If data on patient experience of hospital care are not yet publicly available, are there plans to develop these?
Australia	No	Regional	Yes	n.a.
Canada	Yes	n.a.	www.yourhealthsystem.cihi.ca/hsp/	n.a.
England	Yes	n.a.	http://www.cqc.org.uk/content/inpatient-survey-2014	n.a.
France	Yes	n.a.	No	Yes
Germany	Yes	n.a.	https://www.weisse-liste.de/de/krankenhaus/krankenhausuche/ , https://weisse-liste.krankenhaus.aok.de/ , https://www.krankenhausnavi.barmer-gek.de/	n.a.
Netherlands	Yes	n.a.	www.kiesbeter.nl	n.a.
New Zealand	No	Regional	http://www.hqsc.govt.nz/our-programmes/health-quality-evaluation/publicationsand-resources/publication/2347/	n.a.
Norway	Yes	n.a.	http://www.kunnskapssenteret.no/publikasjoner#index=0&types=175540	n.a.
Sweden	Yes	n.a.	www.npe.skl.se	n.a.
Switzerland	Yes	n.a.	http://www.anq.ch/akutsomatik/akutsomatik-anq-hplus/	n.a.
United States	Yes	n.a.	https://www.medicare.gov/hospitalcompare/	n.a.

care provided by hospitals or GPs. This may not be a coincidence. Although composite performance indicators enjoy much popularity in the media and can help to focus attention on key aspects of performance [27], they give rise to major technical problems that have long been recognised [28]. A recent study comparing ‘quality’ as measured either by hospital-wide standardised mortality ratios or a much more detailed case note review [29], for example, found no significant correlation between the two types of measures, suggesting the need for considerable caution. One of the challenges is that there can be substantial variation in quality of care across the different departments of a hospital. The more detailed analyses of quality of care are, the more useful they seem to be for quality improvement efforts [30], which might help to explain why most countries in our study refrained from publishing composite ratings.

Similarly, we found that data on outcomes of individual professionals (such as mortality rates of individual surgeons in particular specialities) are published very rarely, with England and some parts of the United States being the exceptions. Again, the reluctance of countries to publish this type of information reflects methodological and ethical problems [31]. In particular, there is a danger that health professionals are being blamed for factors outside their control. Furthermore, it creates incentives to game ratings, for example by declining patients with serious conditions [2]. A decline in in-hospital mortality rates by reducing length of stay, for example, could be more than offset by an increase in mortality after discharge [3]. Publishing data on outcomes of individual professionals might also run counter to the increasingly recognised importance of working in teams.

A more fundamental question relates to whether public reporting of quality indicators in general improves care. So far, evidence on this issue is still mixed [2]. There seems to be little effect on the selection of providers by patients (the selection pathway), while public reporting seems indeed to stimulate quality improvement initiatives by

providers (the change pathway) [3]. Some studies suggest that incentives that pursue quality improvements through ‘professional reputation mechanisms’ [32] can be stronger than financial incentives [33]. However, there is still only scant evidence of any impact of public reporting on clinical outcomes [3]. A recent systematic review of public reporting in health care concluded that evidence of any impact of public reporting on quality of care was lacking, except for a possible beneficial effect for nursing homes [34]. Similarly, a study of mortality from three conditions in the United States found that Medicare’s Public Reporting Initiative had modest or no impact [35].

Finally, our study also raised the important question of who should be leading public reporting, an issue that also emerged in earlier surveys [1,36]. While our study focused on public sector initiatives, they are not the only relevant actors. However, they have been leading many efforts that have then been taken up by the private sector. In the United States, many of the innovations in public reporting to patients have come from Medicare, the public payer for older people. These innovations are likely to spill over into the private sector, if private insurers see the value of such information. Overall quality and safety scores on hospitals in the United States are published by Leapfrog Group (<http://www.hospitalssafetyscore.org/>) and Consumer Reports (<http://www.consumerreports.org/health/doctors-hospitals/hospital-ratings/state.htm>), while the online magazine US News also publishes rankings of hospitals (<http://health.usnews.com/best-hospitals/rankings>). In Europe, too, the public sector is leading public reporting on quality of care, but there are also important private sector initiatives. In the Netherlands, for example, some private websites, newspapers and magazines have published rankings for certain treatments and hospitals, such as a list of the top 100 hospitals produced by the daily newspaper, *Algemeen Dagblad* (<http://www.ad.nl/ad/nl/32488/AD-Ziekenhuistop100/index.dhtml>). In Germany, the magazine ‘Focus’ has published a list of the best

hospitals ordered by treatment and diagnosis (<http://focus-abo.de/focus-gesundheit-klinikliste-2013/>), although this is based on the views of selected GPs and specialists. In England, rankings of hospitals are published by Dr. Foster (<http://www.drfooster.com/>).

Our study was also limited by its focus on the national level. However, there are many public reporting initiatives at the sub-national level that deserve closer study. In the United States, for example, there are many initiatives outside of Medicare that are the responsibility of the different states and health organisations, leading to enormous heterogeneity across the country.

5. Conclusions

While the provision of appropriate and meaningful information on health care providers is an essential tool to improve performance and increase transparency and accountability [1], not all types of information are of equal merit [34]. Many countries are working on improving their quality reporting systems with the aim of increasing transparency, but there appears to be a reluctance to publish composite indicators for quality and safety of care or on outcomes of individual professionals. The reasons for this are multifaceted and seem to include persistent methodological challenges of risk-adjustment and attribution, ethical problems, and concerns about potential unintended consequences.

Conflict of interest statement

The authors declare that they have no conflict of interest.

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Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.healthpol.2016.02.008>.

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